



# AL-FARABI KAZAKH NATIONAL UNIVERSITY

80 years of professed leadership

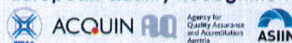


GLOBAL HUB OF THE UN  
"ACADEMIC IMPACT"  
PROGRAM ON SUSTAINABILITY  
<http://unaihub.kaznu.kz/>



UNESCO/UNITWIN Chair Program  
UNESCO Chair on Sustainable  
Development at al-Farabi KazNU

European Quality Recognition



Study in 3 languages:  
Kazakh  
Russian  
English



QS WORLD  
UNIVERSITY  
RANKINGS

Rank  
305  
2014

QS UNIVERSITY  
RANKINGS

Rank  
14  
2014



## About the University

- 14 Schools and 64 Departments
- 83 BA, 86 MA, 60 PhD
- 7 International Centers
- 8 Research Institutes and 25 Centers
- Regional Technopark
- 2 National Level Labs
- More than 80 Students Organizations

## International Centers

- MDP/GLOBAL CLASSROOM, Columbia University
- French-Kazakh Centre for Geo Energies
- Chinese Cultural Center
- Kazakh - Indo - US Collaboration for Engineering Education (KIUCEE)
- Center for European Documentations
- American and NATO Center
- UN Center

## Partnership with International Organizations

- Central Asian Nuclear Reaction Data Center, created by Japan AEA and IAEA
- HP Technology Education and Research Center
- FUJITSU - Smart Library
- CISCO - Networking Academy
- INSPUR - Data Center
- Samsung Innovation Academy

## Presence of Al-Farabi KazNU in abroad

- The Al-Farabi Cultural and Research Center at the University of Jordan, Jordan
- "Initiative campus in campus" with University of Tsukuba, Japan
- Al-Farabi laboratory at the University of Rostock, Germany
- Joint Chimerical Laboratory at the International Center for Chemical and Biological Science, Karachi, Pakistan
- IGIP Kazakhstan Center, IGIP, Italy

## International Research Grants

- ISTC, EBRD, World Bank, Tempus, ERASMUS MUNDUS, NATO, IAEA, OSCE, Open Society Institute, Fund of Carnegie, Volkswagen, FulBright, Korea Foundation, Japan Foundation, UNWTO

London 2012

al-Farabi KazNU Alumni



## Sport Achievement

17th Asian Games, Incheon 2014,  
Medal Winners:  
Gold-4, Silver-4, Bronze-4  
Medal Winner:  
Gold -4,  
National Team Members-41

- 7 Ministers,
- 4 Governors,
- 31 Rectors,
- 54 Top Managers,
- 1/3 Members of Parliament
- 1/5 CEOs of National Corporations

15th Summer Olympics,  
London 2012,  
Gold Winner Podobedova

[WWW.KAZNU.KZ](http://www.kaznu.kz)  
[HTTP://ICD.KAZNU.KZ](http://icd.kaznu.kz)



# ISOCARD 2015

ISOCARD ҚОҒАМЫНЫҢ  
«ЖІБЕК ЖОЛЫ ТҮЙЕЛЕРІ:  
ТҰРАҚТЫ ДАМУДА  
КАМЕЛИДТЕРДІ ЗЕРТТЕУ»

ALMATY

4<sup>th</sup> КОНФЕРЕНЦИЯСЫ

4<sup>TH</sup> CONFERENCE OF ISOCARD  
"SILK-ROAD CAMEL:  
THE CAMELIDS, MAIN STAKES  
FOR SUSTAINABLE DEVELOPMENT"

4<sup>АЯ</sup> КОНФЕРЕНЦИЯ ISOCARD  
«ВЕРБЛЮДЫ ШЕЛКОВОГО ПУТИ:  
ИССЛЕДОВАНИЯ КАМЕЛИДОВ  
ДЛЯ УСТОЙЧИВОГО РАЗВИТИЯ»

ҰЙЫМДАСТЫРУШЫЛАР / ORGANIZATORS



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ISOCARD ҚОҒАМЫНЫҢ  
«ЖІБЕК ЖОЛЫ ТҮЙЕЛЕРІ:  
ТҰРАҚТЫ ДАМУДА  
КАМЕЛИДТЕРДІ ЗЕРТТЕУ»

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ISSN 1999-3951



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**“Жібек жолы түйелері: тұрақты дамуда**  
**камелидтерді зерттеу”**  
**4-ші конференциясының**  
**МАТЕРИАЛДАРЫ**  
Қазақстан, Алматы қаласы, 8-12 маусым, 2015 жыл

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For Sustainable Development”  
June 8-12, 2015 Almaty, Kazakhstan

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## SESSION 4. CAMELIDS IN THEIR PHYSICAL AND TECHNICAL ENVIRONMENT

### THE USE OF DATE BLOCKS FOR SUPPLEMENTARY FEEDING OF GROWING CAMELS

Alafaliq A<sup>1</sup>, Ben Abdallah A<sup>1</sup>, Almasaud A<sup>2</sup>, Faye B<sup>2,3</sup>

<sup>1</sup>FAO Project (UTFN/SAU/043/SAU) Date palm Research Center, Al-Hassa 31982, Saudi Arabia; <sup>2</sup>FAO Camel Project, Kharj, Saudi Arabia; <sup>3</sup>CIRAD-ES, UMR18, Montpellier, France

The date production in arid countries like Saudi Arabia includes a part of discarded dates for human consumption. These discarded dates could be used as supplementary feeding for livestock. In trials carried out in a camel farm, date blocks were prepared which composed of 50% dates, 40% wheat bran, 5% urea to increase nitrogen level and 5% cement as binding material. Two groups of 7 camels each 2-3 y old received basal diet composed of alfalfa (2kg/100kg LW) and 1 kg of supplementary feed, i.e. market concentrated for control group and date blocks for treated group. The duration of the trial was 4 months. Blood sampling was done every fortnight for determining urea, glucose, AST and ALT and the growth of camels was monitored by regular weighing at sampling time. Weighing and blood sampling were done in the morning before feed distribution. The intake was  $1.94 \pm 0.19$  and  $1.85 \pm 0.19$  kg/100kg LW in control and treated group respectively, and the mean daily weight gain was 407 and 305g/day, respectively, corresponding to a weight gain of 0.43 kg in control group vs 0.32 kg in treated group, i.e. a consumption index of 2.33 and 3.11 kg concentrates/kg weight gain, respectively. There was no significant difference in the blood parameters. In conclusion, date blocks could be safely used for supplementary feeding of young camels as partial substitution for the regular feed.

**Keywords:** Camel feeding, growth, urea, nutritional biochemistry

### CAMELS (*CAMELUS DROMEDARIUS*) ENVIRONMENTAL FEEDING CONDITIONS IN SOUTH DARFUR – SUDAN

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Camels feeding conditions in south Darfur are changing according to the regular movements that depend on the season from north to south regions and return again the journey. The study was performed by the observations from the field trips to their autumn and summer season environments and taking photos for documentations. During autumn season camels are move to the north, where they browse and graze in a rich environment full of different green trees, shrubs and grasses. While during summer season they walk long distances crossing dry pastures that composed of dry or some ever green trees, dry grasses, and also dry pasture residuals, to reach their dry wadi-beds where available green trees and shrubs. Environmental conditions in South Darfur are environments that camels able to maintain and find their feed needs during autumn and summer season from natural pastures, this interaction gets camels' benefits impact to human in the region and if special improvements occur during summer that could be better for these camels.

**Key words:** Camel, Environment, Feeding, Season, South Darfur.

### ОҢТҮСТІК СУДАН-ДАРФУРДАҒЫ ТҮЙЕЛЕРДІ (*CAMELUS DROMEDARIUS*) ҚОРЕКТЕНДІРУДІҢ ЭКОЛОГИЯЛЫҚ ЖАҒДАЙЛАРЫ

Оңтүстік Дарфурдағы түйелерді қоректендіру жағдайлары мезгілдердің солтүстіктен оңтүстік аудандарға ауысуына қарай жиі жылжуына байланысты өзгереді және қайта өз қалпына келіп отырады. Арнаулы зерттеу жұмыстары бойынша олардың күздік-жаздық маусымдар аудандарында бақылау жүргізіліп, құжаттарға қажетті суреттерге түсірілді. Күз мезгілі кезінде түйелер әр түрлі жасыл шөпке бай ортада жайылу үшін солтүстікке жылжиды. Жаз мезгілінде құрғақ алқаптарды, құрап кеткен кейде мәңгі жасыл көктері бар жайылымдарды басып өтіп, үлкен жол жүріп, өздерінің жасыл ағаштар мен жапырақтарға толы құрғақ жайылымдарына жетеді. Оңтүстік Дарфурдағы экологиялық жағдайлар жаз-күз мезгілдерінде түйелердің табиғи жайылымдардан қорекке алатын қажеттерін өтеу мен тұрақтандыру үшін ыңғайлы орта болып табылады. Бұл қарым-қатынас аудандағы түйелердің адамдарға ерекше ықпал етуіне жол ашады. Жаз мезгілінде арнайы жағдайларды жақсарту, түйелерге жақсы жағынан өз есерін тигізетін еді.

**Түйін сөздер:** түйе, қоршаған орта, қоректендіру, мезгіл, Оңтүстік Дарфур.